

# Selas Superflame™ Burners

## Superflame™ 7500

Capacity: 7,500,000 Btu/hr (1978 kW)

| Parameter                                                                               | Burner Velocity                                                                                                                         |             | Superflame™<br>5000 |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------|
| <b>Maximum Input, Btu/hr (kW)<sup>1</sup></b>                                           | Medium and High Velocity                                                                                                                |             | 7,500,000 (1978)    |
| <b>Minimum Input, Btu/hr (kW)<sup>1</sup></b><br><i>For lower inputs, contact Selas</i> | Medium and High Velocity                                                                                                                |             | 750,000 (198)       |
| <b>Minimum Input Fixed Air, Btu/hr (kW)<sup>1</sup></b>                                 | Medium and High Velocity                                                                                                                |             | 187,000 (49)        |
| <b>Main Gas Inlet Pressure, "w.c. (mbar)</b>                                            | High Velocity                                                                                                                           | Natural Gas | 10.2 (25)           |
|                                                                                         | Medium Velocity                                                                                                                         | Natural Gas | 7.3 (18)            |
| <b>Air Inlet Pressure, "w.c. (mbar)</b>                                                 | High Velocity                                                                                                                           | Natural Gas | 14.9 (37)           |
|                                                                                         | Medium Velocity                                                                                                                         | Natural Gas | 12.4 (31)           |
| <b>High Fire Visible Flame Length, inches (mm)</b>                                      | High Velocity                                                                                                                           | Natural Gas | 105 (2670)          |
|                                                                                         | Medium Velocity                                                                                                                         | Natural Gas | 120 (3050)          |
| <b>Approximate Flame Velocity, ft/s (m/s)</b>                                           | High Velocity                                                                                                                           |             | 400 (122)           |
|                                                                                         | Medium Velocity                                                                                                                         |             | 260 (79)            |
| <b>Maximum Combustion Air Temperature</b>                                               | 700°F (371°C)                                                                                                                           |             |                     |
| <b>Flame Detection</b>                                                                  | Flame rods or UV scanners can be used with all combustors, any gaseous fuel <sup>2</sup> , and up to the maximum operating temperature. |             |                     |
| <b>Fuels</b>                                                                            | Natural Gas <sup>2</sup>                                                                                                                |             |                     |

- All imperial inputs based upon gross calorific values (HHV). All metric inputs based upon net calorific values (LHV).
- Consult Selas for other fuels.
- Other notes:
  - > All information is based on laboratory testing in neutral (0 "w.c., 0 mbar) pressure chamber. Different chamber conditions may affect emissions and pressure.
  - > All information is based on standard outer tube design. Changes in combustor will alter performance and pressures.
  - > All inputs based upon standard conditions; 1 atmosphere, 70°F (21°C). Fuel composition at 1000 BTU / ft<sup>3</sup> HHV for natural gas.
  - > Selas reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.
  - > Plumbing of air and gas will affect accuracy of orifice readings. All information is based on generally acceptable air and gas piping practices.

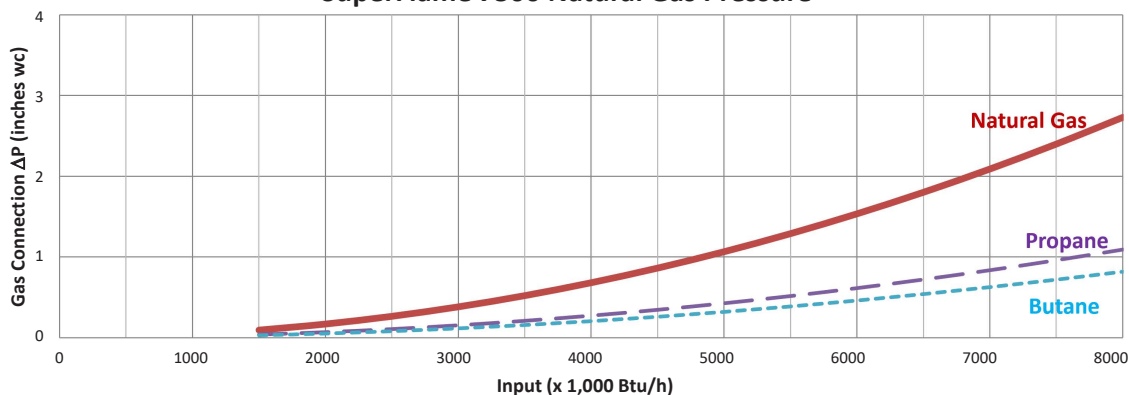


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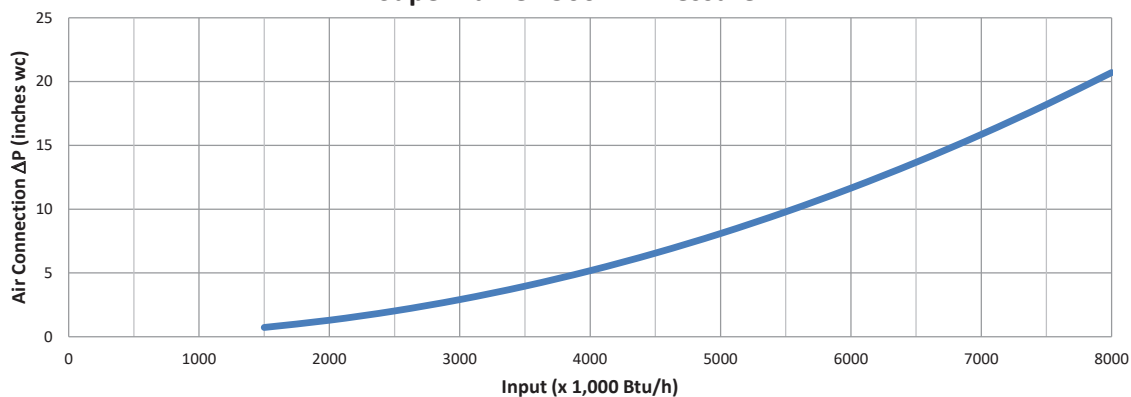
# Selas Superflame™ Burners

## Performance Graphs, Imperial

### SuperFlame 7500 Natural Gas Pressure

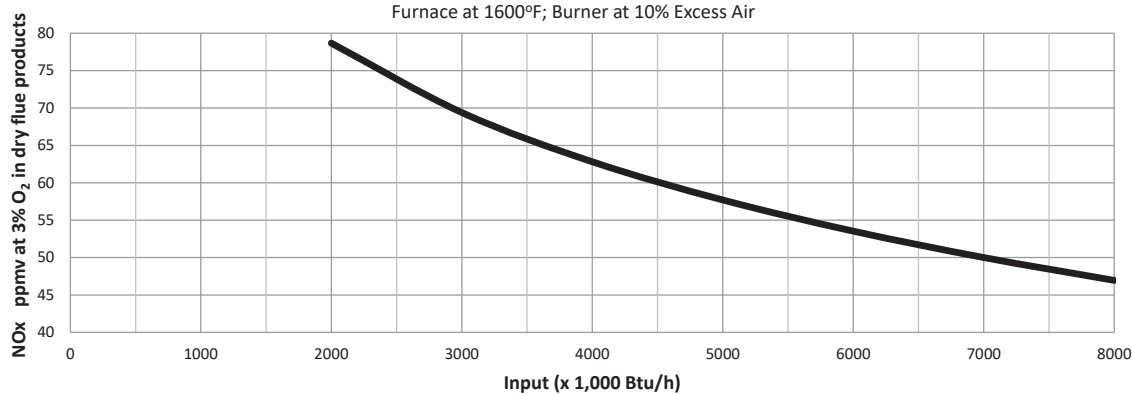


### SuperFlame 7500 Air Pressure



### SuperFlame 7500 NOx Emissions

Furnace at 1600°F; Burner at 10% Excess Air

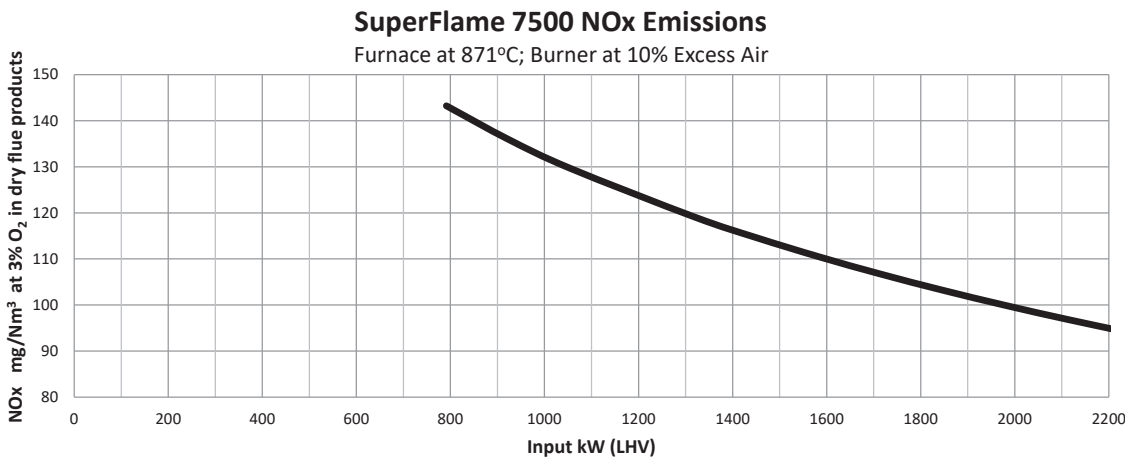
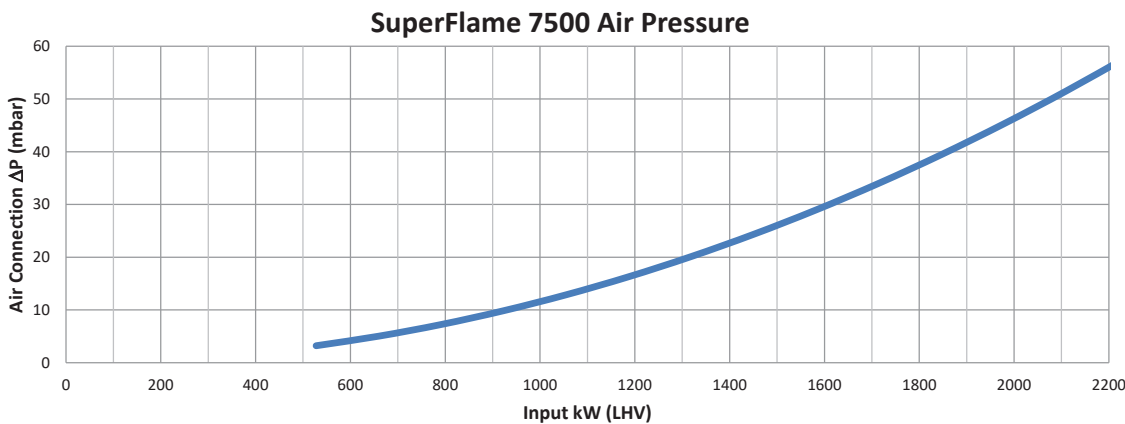
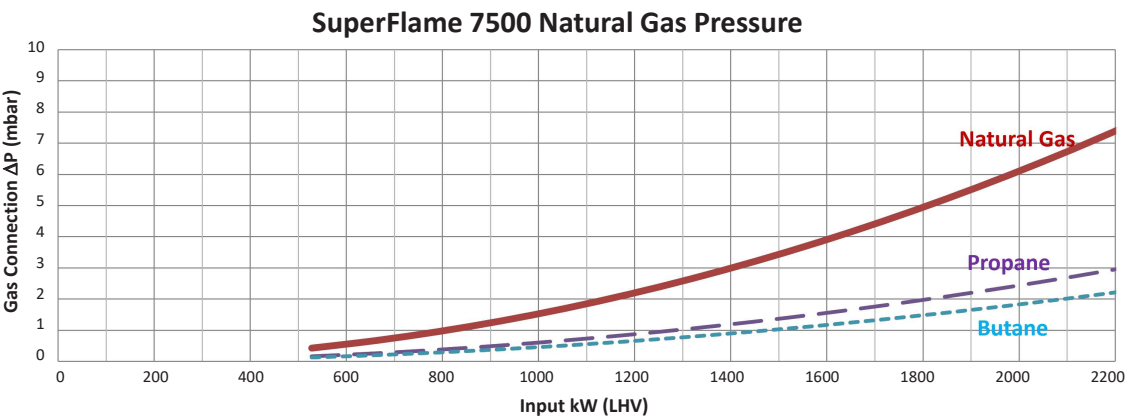


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Data Sheet

# Selas Superflame™ Burners

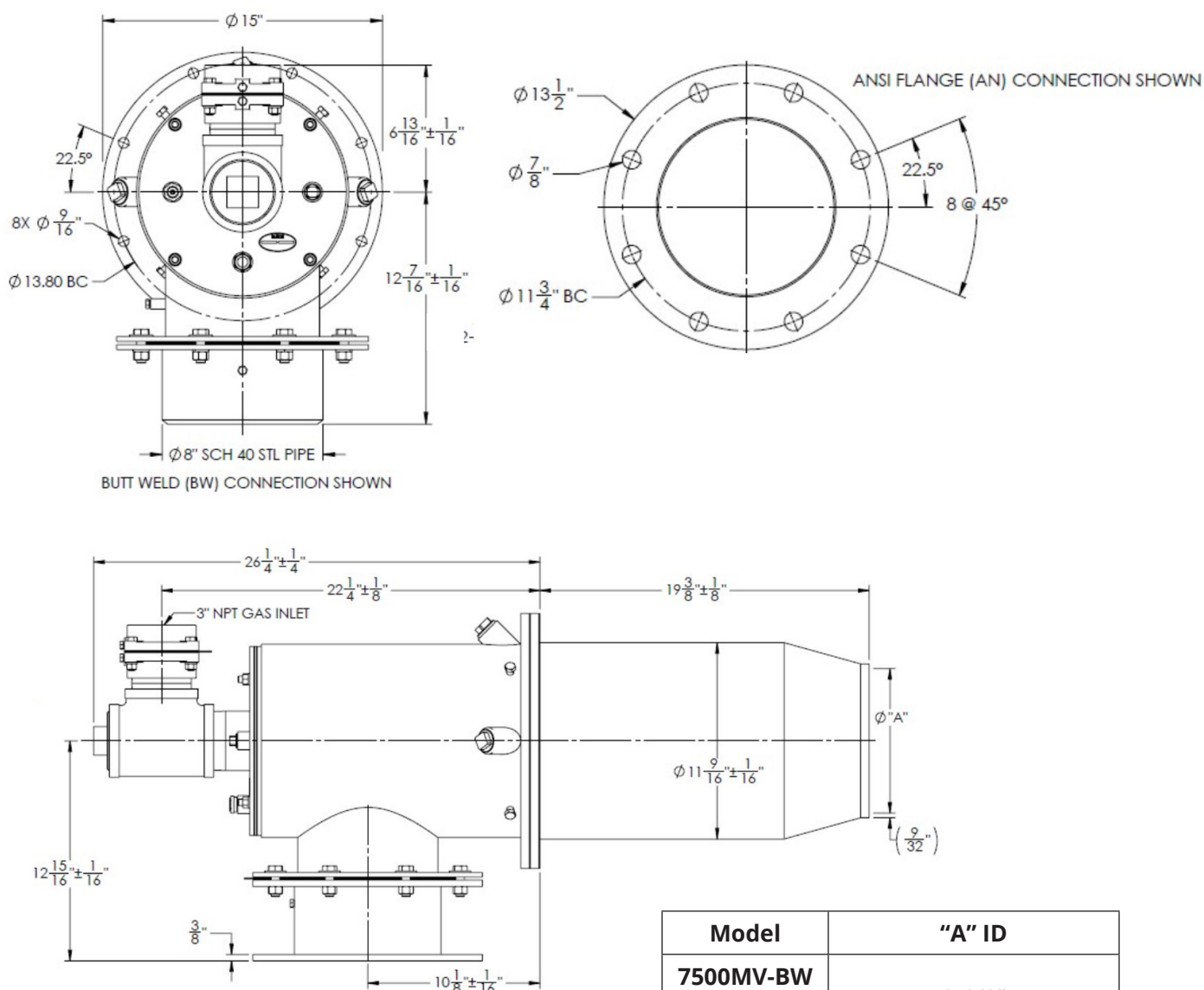
Performance Graphs, Metric



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## Superflame 7500 Drawing



| Model     | "A" ID |
|-----------|--------|
| 7500MV-BW | 8-1/2" |
| 7500MV-AN |        |
| 7500HV-BW | 6-3/4" |
| 7500HV-AN |        |

NOTE: Gas and air inlets can be rotated in 90° increments.